December 28, 2005

DRAFT EPA COMMENTS

on the

Chino Mines Company
Remedial Investigation Report
Smelter/Tailings Soils Investigation Unit
Hurley, New Mexico

Dated: August 22, 2005

The U.S. Environmental Protection Agency (EPA) provides the following draft comments for consideration on the Remedial Investigation Report for the Smelter/Tailings Soils Investigation Unit (RI Report) for the Chino Mines Company site (Site), located near Hurley, New Mexico.

GENERAL COMMENTS:

1. The RI Report does not make any comparison of the Site data to ecological screening levels, only human health screening levels (*see* Specific Comment No. 3, below). Such comparisons are usually made in the Baseline Risk Assessments, which are typically components of a remedial investigation report (*see also* USEPA Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, EPA/540/G-89/004). It is assumed that such comparisons are, or will be, addressed in the Site-Wide ERA being performed by the New Mexico Environment Department.

2. The S/TSIU included the sampling of soil, sediment and surface water and the analytical data for these media are reported in the RI Report. In the RI Report, the site data are compared to screening levels. The soil analytical results are compared to EPA Region 6 human health soil screening levels (SSLs). The sediment analytical results also appear to be compared to the EPA Region 6 SSLs. However, there is no discussion of the screening levels used for surface water in Section 4.2.6 (Surface Water Sampling Results). In Section 4.4.3 S/TSIU Decisions - Surface Water, it is stated that the New Mexico Water Quality Control Commission (WQCC) regulations (20.6.4.900, Part M) - Surface Water Exposure Route (SWER) numerical criteria are used to screen constituents. Further, such criteria are presented in Table 4-20 of the RI Report for only five metals (excluding copper). It is not clear from the RI Report why WQCC criteria were used, rather than the EPA Region 6 medium-specific human health screening levels for tap water. For example, the SWER criterion for antimony is 4.3. The EPA Region 6 human health tap water criterion for antimony is 0.015. Since the Conceptual Site Model shows surface water to be an exposure pathway for the ingestion/dermal contact route of

exposure (*see* Figure 3-3), it would be appropriate to use the most conservative criteria as human health screening levels for surface water. It is also recommended that criteria be provided for all the metals detected, not just a select few. If there are no screening levels available for a constituent, the use of an Federal Maximum Contaminant Level (MCL) would be justified.

3. There is little discussion on reference areas selected for comparison to site data in the RI Report. It is suggested that such discussion be included for each medium. For example, define the location of the reference areas, the rationale for their selection, how many samples were collected or grid size/spacing and the sample locations. A map showing the location of the reference sample locations would also be appropriate for each medium.

SPECIFIC COMMENTS:

4. Section 4.1.2 - Data Quality Assessment, page 4-2:

   In the last paragraph on page 4-2, the RI Report states that Soil Screening Levels for ecological risk assessment have not been provided, therefore, the comparison between the reporting limits and the ecological SSLs were not part of this assessment. Some further clarification in the text is recommended here. Why were such SSLs not considered when determining reporting limits? Is it the intent of the State of New Mexico to perform such an assessment at some later date? If so, will the reporting limits be low enough to make the comparison to ecological screening levels.

5. Section 4.2.6 - Surface Water Sampling Results, page 4-21:

   This section should include a discussion of the screening criteria to be used for surface water (*see* General Comments No. 2, above).

6. Section 4.3.2 - Historical Release Mechanisms, page 4-35:

   The last sentence of the first paragraph states that surface water is not a pathway on Figure 4-35. This is somewhat confusion and needs clarification. The permanent stocked ponds were sampled because they are considered a potential pathway in the Conceptual Site Model (*see* Figure 3-3)

7. Section 4.4.2 - Sediment, page 4-37:

   The first paragraph in this section states that sediment sample results for Drainages BD-1 through BD-4 are not included in the comparison to nearby soil sample results due to an absence of such soil samples. These sample results must be compared to criteria established for the sediments. If there are no samples in the near vicinity, other appropriate soil samples at the Site or reference area must be selected for comparison.

5. Table 4-2 - Soil Sample Results, page 20 of tables:

   Those iron values that exceed the criterion should be in bold and underlined.

6. Table 4-20 - Comparison of surface water analytical results with human health-based criteria:

   A new table should be included in the RI Report that shows criteria for all the metals detected in the analyses, not just five metals.

7. Figure 4-35 - CSM for Historic Sources:

   Surface water should be depicted as an exposure medium, as shown on Figure 3-3.